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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/723,585	11/28/2000	Alexander J. Dyakonov	4800-090	8519

7590 12/17/2002
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EXAMINER
LOPEZ, CARLOS N

ART UNIT	PAPER NUMBER
1731	14

DATE MAILED: 12/17/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

AS-14

Office Action Summary	Application No. 09/723,585	Applicant(s) DYAKONOV ET AL.	
	Examiner Carlos Lopez	Art Unit 1731	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 November 2002.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3,22-30,32-40,46 and 47 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3,22-30,32-40,46 and 47 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 11/6/02 has been entered.

Response to Amendment

The amendment filed on 11/6/02 has been entered as Paper No. 13.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

- 1) Claims 1-3 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The present disclosure does not support a flux from the adsorption material being separate¹ from the mainstream combustion products. At page 5 of the present disclosure,

¹ sep-a-rate (sèp'e-rât') verb

sep-a-rat-ed, sep-a-rat-ing, sep-a-rates verb, transitive

1. a. To set or keep apart; disunite. b. To space apart.

2. To differentiate or discriminate between; distinguish.

3. To remove from a mixture or combination; isolate.

4. To part (a couple), often by decree: *She was separated from her husband last year.*

5. To terminate a contractual relationship, as military service, with; discharge.¹

Art Unit: 1731

support is provided for the presence of a flux from the adsorption material but does not support said flux being separate from the main stream combustion products.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2) Claims 1-3, 22-30, 32-40, 46 and 47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dale et al (US 4,317,460) in view of Wahle et al (US 4,301,816). Dale discloses catalyst for the oxidation of CO to CO₂ for use in a filter of a smoking product (Column 6, lines 57-68). A smoking product as defined by Dale may be a cigarette as disclosed in Column 1, line 4. Dale's catalyst system comprises of a metal component belonging to Groups 6-8 of the periodic table (Column 4, lines 15-50) with a support structure (absorbent) made of a zeolite or alumina (amorphous oxide) (Bridging paragraph of Columns 4 and 5). Dale additionally teaches that the claimed CO pump may be used in the triple filters for smoking products (such as a cigarette as disclosed in Column 1, line 4), wherein the middle portion contains the catalyst system or the catalyst system may be part of the whole cigarette filter (Column 6, lines 57-68). Dale is silent disclosing a cigarette having a tobacco column enveloped by a wrapper. However, it is expected that conventional cigarettes comprise of a tobacco column having a wrapper enveloping the tobacco column. Dale is silent disclosing venting holes adjacent to the absorbent material. However, Wahle teaches of providing venting holes adjacent the filter

of a cigarette in order to decrease the percentage of nicotine and tar inhaled by the smoker via perforations on the tipping paper (Column 1, Lines 35-40). At the time the invention was made it would have been obvious to a person of ordinary skill in the art to use perforated tipping paper as Taught by Whale et al in order to reduce inhaled tar and nicotine in Dale et al's cigarette.

Claim 1 additionally recites a flux from the adsorbent material being separate from the mainstream combustion products. The un-reacted or reacted carbon monoxide desorbed from the absorption material would create a flux from the adsorption material during an inter puff period. A portion of the desorbing flux released from the adsorption material would be separated from the main stream of combustion products via the perforations of the tipping paper surrounding the pump/filter during an inter puff period.

As for claim 29, Dale is silent disclosing the filter material of the other filters in its triple filter assembly and one of ordinary skill in the art would assume they are conventional filters made of conventional filter material such as those claimed by applicant. Examiner takes official notice that it is well known cellulose acetate has been used as filter material for cigarettes.

As for claims 46 and 47, the claimed fitting is the tipping paper present in conventional cigarettes in order to join the filter element to the tobacco rod element of a filter cigarette.

Response to Arguments

Applicant's arguments filed 11/6/02 have been fully considered but they are not persuasive.

Applicant's arguments fail to comply with 37 CFR 1.111(b) because they amount to a general allegation that the claims define a patentable invention without specifically pointing out how the language of the claims patentably distinguishes them from the references.

In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

Applicant traverses the rejections made to claims 1-3 under 35 U.S.C 112 1st Paragraph. Applicant's cited section of the specification does not support the claimed limitation of "absorbent material separate from main stream combustion product". The disclosure only supports a diversion of carbon monoxide from the mainstream smoke but does not provide support for the limitation that the release of carbon monoxide or reaction product thereof from the adsorbent material would create a flux from the adsorbent material that is **separate** from the main stream. It is clear from the specification that there is a flux created by the released carbon monoxide or reaction products from the adsorbent material but the claimed limitation that the flux is separate from the main stream smoke is not supported in the disclosure. In fact some of the released carbon monoxide and reaction products may flow back to the mainstream smoke when there is no suction by the user.

Applicant additionally argues that Wahle et al does not provide motivation to provide venting holes that would divert main stream smoke from the user. The claimed limitation is notoriously known in the tobacco art. As explicitly taught by Wahle, providing venting holes on the filter of a cigarette decreases the percentage of nicotine and tar inhaled by the smoker via perforations on the tipping paper (Column 1, Lines 35-40). Since both Dale et al and Wahle et al inventions are directed to decreasing the deleterious components of the tobacco mainstream smoke, it would have been obvious to a person of ordinary skill in the art to have provided

venting holes to Dahle cigarettes in order to further decrease the inhalation of deleterious compounds as taught by Wahle et al.


Additionally, the newly added limitations to claims 1,22, 46, and 47 do not add additional structural limitations that would distinguish it from Wahle and Dahle references. The newly added limitations such as "carbon monoxide desorbed from the adsorbent material during an inter-puff period" only describe the function of a filter without adding new structural limitations. It is inherent or at the least obvious that not all the oxidized carbon monoxide will remain adsorbed in the adsorbent material.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Carlos Lopez whose telephone number is (703) 605-1174. The examiner can normally be reached on 8am - 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven Griffin can be reached on (703) 308-1164. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 305-7718 for regular communications and (703) 305-3599 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0651.

C.L
December 12, 2002


STEVEN P. GRIFFIN
SUPERVISORY PATENT EXAMINER
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